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This article is about extraordinary phenomena, and what people have made of them. The phenomena in question are those associated with unorthodox areas of psychological knowledge - Psychology's 'occult doubles' (Leahey & Leahey, 1984) - namely, mesmerism, spiritualism, psychical research and parapsychology. The history of unorthodox psychological knowledge has been written about extensively in recent decades, largely with a view to understanding the various ways in which scientific knowledge and practices relate to the wider social and cultural contexts within which they are produced.¹ This article focuses on the ongoing disputes over the reality of the phenomena associated with (one might say the very basis of) these unorthodox areas of psychological knowledge. It does so as part of the history of both Psychology and psychology (to adopt Graham Richards's (2002) useful shorthand distinction between, respectively, the discipline and its subject matter). This particular focus, like Richards's shorthand, is part of a wider argument about the need for history as a part of Psychology, based on the view that Psychology has a reflexive relationship with its own subject matter. In short, Psychology is not only the study of thought and behaviour but also the product of thought and behaviour, produced by certain people (Psychologists) thinking and behaving in certain ways (doing Psychology). How Psychologists do Psychology is shaped by the social context in which they do it, and this results in particular versions of psychological knowledge. What history shows is that, at different times and in different places, Psychology has taken a variety of forms, and that in defining both what can be studied and how it should be studied, it has produced radically different versions of what we are (e.g. Danziger, 1990, 1997; Graumann & Gergen, 1996; Hacking, 1986, 1995a; Kusch, 1999; Richards, 2002; Smith, 1997, 2005, 2007). It is, therefore, essential to psychological understanding that we are aware of how psychological knowledge comes to be what it is, and how that in turn shapes our understanding of ourselves.

The history of unorthodox psychological knowledge has been a fruitful topic in which to explore the constructed nature of psychological knowledge, the various disputes over what has counted as orthodoxy having provided some exemplary cases of boundary-work over scientific status and expertise (e.g. Shapin, 1979; Collins & Pinch, 1982; Gieryn, 1983; Coon,

¹ Key texts include: Wallis (ed.) (1979); Mauskopf and McVaugh (1980); Collins & Pinch (1982); McLendon (1984); Leahey & Leahey (1984); Oppenheim (1985); Cerullo (1992); Hess (1993); Crabtree (1993); Winter (1998); Luckhurst (2001). For a recent overview of much of the literature, see: Noakes (2008).

1992; Hess, 1993; Noakes, 2004; Wolfram, 2006; Aprem, 2010). Several scholars have identified discursive patterns in the form of particular disputes about the reality of such phenomena and the scientificity of studying them (e.g. Collins & Pinch, 1979; Gieryn, 1983; McLenon, 1984; Hess, 1993; Lamont, 2007a; Zingrone, unpub'd). Disputes over extraordinary phenomena, like scientific disputes on other matters (e.g. Gilbert & Mulkay, 1984), help us understand the discursive construction of what comes to count as orthodox scientific knowledge.

However, these disputes can also shed light on psychological matters. After all, throughout all of this, the disputants have not only been negotiating scientific status and expertise, they have also been expressing beliefs about the phenomena in question. Indeed, the disputes over scientific status and expertise in the study of extraordinary phenomena have themselves emerged from, and have been part of, more widespread disputes about the reality of such phenomena, and these were, at the end of the day, expressions of belief about the phenomena. By considering these scientific disputes as manifestations of belief, it is argued that Psychological understanding of beliefs, far from being an objective study of a psychological topic, has been an ongoing expression of the beliefs it has purported to study. And, as we shall see, these disputes can themselves contribute to how we understand such beliefs.

Making the facts

There have been countless extraordinary phenomena associated with mesmerism, spiritualism, psychical research and parapsychology. Despite their different names, theoretical associations and historical contexts, they have nevertheless shared the core feature that makes it possible to discuss them together, namely that they have been viewed by both proponents and critics as extraordinary or anomalous in relation to normal human experience and contemporary scientific knowledge. Thus, while individuals, including scientists, have obviously disagreed over the plausibility of such phenomena (depending upon their particular views about how the physical world might work), it is because people have thought them extraordinary, and most scientists have thought them incompatible with current scientific knowledge, that the disputes in question took place.

In disputes over the reality of such phenomena, since at least the nineteenth century, both proponents and critics have consistently appealed to the facts.² However, facts do not speak for themselves. In order to be deployed in an argument, they need to be not only made relevant but also made convincing; they need to be described, and in such a way that they are treated by others as factual (Potter, 1996). Thus, when proponents have cited particular facts, their fact-ness (that they really happened) has invariably been constructed via appeals to the reliability of the observation. For reasons that are hardly difficult to imagine, observers of extraordinary phenomena have always described events in terms that stressed they were accurate descriptions of real events, and not the result of, say, imagination, hallucination, hypnosis, and so on. This has ranged from making relevant the conditions at the time (such as lighting) to explicit avowals of sobriety and honesty.³

However, extraordinary facts need to be made not only real but also extraordinary. Thus, descriptions of these facts have also been based on the exclusion of alternative ('ordinary') explanations. For example, when lucid somnambulists displayed the ability to see whilst blindfolded, when mediums moved objects or provided details about sitters, or when thought-readers obtained information from others, their ability to have done these things through ordinary means (such as, respectively, peeking, the secret use of hands and feet, prior research, or the use of codes) was regularly excluded as part of any reported observation (e.g. Podmore, 1902; Beloff, 1993). In short, it has always been an essential part of the argument for the reality of any extraordinary phenomenon, both by definition and in practice, that the event really occurred as described, and was not the result of ordinary processes.

Such arguments, of course, have not always been believed. Critics have argued against the reality of the phenomena (by appealing to possible errors in observation or report), and they have argued against their extraordinariness (by claiming that the event might be the result of ordinary processes, such as chance or fraud). Such arguments were made on a regular basis by critics of mesmerism and spiritualism, and have continued to be made ever since (e.g. Podmore, 1902; Collins & Pinch, 1979; McClenon, 1984). They have been popular because they are always compatible with any given report. One can never exclude the possibility of

² Several scholars have discussed how, in the seventeenth century, supposedly theory-neutral 'matters of fact' became a fundamental feature of scientific knowledge, and have noted their dependence upon notions of probability and credible testimony, not least when they described extraordinary or miraculous phenomena (e.g. Shapiro, 1983; Dear, 1990; Daston, 1991; Shapin, 1994; Serjeantson, 1999). While the rhetorical and social features of such testimony are no doubt relevant to a longer view, this article limits its scope to the period since c.1840.

³ For a good range of examples of accounts of spiritualist phenomena that deploy such themes, see: London Dialectical Society (1871). For examples of recent analyses of the rhetoric of such accounts, see: Wooffitt (1992); Lamont (2007a).

errors in observation, nor can one exclude the possibility of fraud since, by its very nature, successful deception relies upon methods that are unknown (this is why, when one observes a magic trick, and does not know how it is done, one need not conclude that it is a genuine miracle, but simply assume there was some kind of deception involved). Rhetorically speaking, what such arguments do is warrant an alternative ‘sceptical’ conclusion that is compatible with the evidence, but that avoids the need to provide a more detailed explanation of what actually happened (Lamont, Coelho & McKinlay, 2009). In short, there has been a perennial counter-argument - either the alleged event did not really happen, or else, if it did, then there is an ordinary explanation for it – that can be made against any claim about an extraordinary event. Thus, by making this argument, one can always maintain a position of disbelief in the face of reported extraordinary facts.

Though observations of extraordinary phenomena have been the most obvious facts in dispute, there have been other kinds of observed facts that have been cited as equally relevant, and which have been cited primarily as negative evidence. First, mesmerists, mediums and psychics have regularly failed in their attempts to display the phenomena. Second, critics, particularly sceptical conjurors, have often used trickery to demonstrate similar phenomena, and have claimed that these ‘duplications’ show that such phenomena can be produced by ordinary means. Third, many individuals were allegedly caught cheating, and these ‘exposures’ have been presented as clear proof of fraud. Failures, duplications and exposures were regularly held up as negative evidence against the reality of mesmeric, spiritualist and psychic phenomena, and have continued to be in disputes over paranormal phenomena more recently. They have, of course, been framed by critics as facts that self-evidently argue against the reality of such phenomena. However, as we shall see, proponents have long argued that such a conclusion is far from self-evident.

Proponents have, of course, often disputed whether a given episode constituted a failure, an accurate duplication or a legitimate exposure. And, when they have accepted that a particular case did indeed constitute a failure, duplication or exposure, they have at the same time appealed to other evidence of success, of phenomena that have not been duplicated, and of individuals who have not been exposed. Such disputes can be found in countless references throughout the literature.⁴ However, what may be more surprising is that even when a particular episode has been accepted as a failure, duplication or exposure, proponents have

⁴ For some examples of disputes over failures, duplications and exposures, see: Weekes (1843); Vernon (1844); ‘Anti-mesmerism’, *Bristol Mercury*, 8 February, 1845, p. 8; ‘The Davenport brothers’, *Spiritual Magazine*, 5(11), 1864, p. 522; ‘Spiritualism at Brighton—the Davenports’ double’, *Spiritual Magazine*, 6(3), 1865, p. 127; ‘A séance with Miss Cook’, *Spiritual Magazine*, 1(12), 1873, p. 555-559; Podmore (1902) p. 89.

been able to frame it as evidence supporting, rather than challenging, the reality of the phenomena.

Demonstrations of extraordinary phenomena have regularly failed. Yet even when proponents have accepted that a particular episode was a failure, they have nevertheless framed it as positive evidence in favour of the reality of the phenomena. For example, when lucid somnambulists failed to display clairvoyance, proponents argued that this was the result of particular conditions that were not conducive to lucid somnambulism (Weekes, 1843; Vernon, 1844; Gregory, 1851). Failure could also be framed as evidence that trickery was not involved since, if it were a trick, it should work every time. According to one observer of lucid somnambulism (in which a subject attempted to see whilst blindfolded), ‘exceptions to his general accuracy were, however, to me proofs of the absence of all collusion’ (A lover of truth, 1844). Thus, occasional failure was presented as a result of the nature of the phenomena, and as positive evidence for its authenticity (Lamont, 2010a). Spiritualists regularly made very similar arguments about mediums who failed: such failures were only to be expected since mediums were not in control of the phenomena, and the fact that they happened was evidence that there was no fraud involved.⁵ Central to this argument was the idea that individuals were not in control of whatever mechanism allowed the phenomena to occur, an idea that has remained a feature of psychics since, and has continued to allow failure to be framed as evidence of this lack of control, and against there being trickery involved (Fuller, 1975; Lamont & Wiseman, 1999). Indeed, psychical researchers and parapsychologists have often appealed to the elusiveness of psi as a reason for failure to replicate positive results (Beloff, 1994). Thus, what has been said of more recent scientific controversies (Collins & Pinch, 1982; Collins, 1992) can be extended to disputes over extraordinary phenomena since at least the beginning of the Victorian period. In short, by framing failure as evidence of the nature of the phenomena, and as evidence against fraud, seemingly negative evidence can be, and has been, framed as positive evidence by proponents.

Similarly, duplications of extraordinary phenomena by trickery, even when accepted as such, have been framed as evidence for the reality of the phenomena. For example, analogies have been made with money, something that is genuine but can also be counterfeited.⁶ More commonly, however, duplications have themselves been framed as genuine phenomena. For

⁵ The idea that mediums could be expected to fail as they were not in control was a widespread theme. For an example of failure being seen as evidence of a lack of trickery, see: ‘The Davenport brothers’, *Spiritual Magazine*, 1864, 5(11), p. 503.

⁶ ‘Thackeray and Dickens on Spiritualism’, *Spiritual Magazine*, 1860, 1(9), 388; Home, 1888, p. 218

example, performances of blindfolded vision in 1845, presented as mere entertainment and in direct contrast to lucid somnambulism, could nevertheless be viewed as genuine clairvoyance, and spiritualists later did the same with avowed duplications by trickery, sometimes even arguing with the performer that he was wrong to deny his mediumistic powers.⁷ Indeed, it has been the common experience of mentalists (magicians who simulate extrasensory perception) that, even when explicitly told that a particular feat is not paranormal, some people nevertheless express a belief that it is (Lamont & Wiseman, 1999). Both by analogy with (other) genuine phenomena that have been faked, and by framing avowed forgeries as genuine, duplications have been constructed as evidence in favour of the reality of the phenomena.

Finally, exposures of fraud have been disputed not only in terms of whether they counted as an exposure, but also in terms of what an acknowledged exposure has meant as evidence. On many occasions, proponents have accepted that a particular episode amounted to an exposure but nevertheless framed the events as evidence in favour of the reality of the phenomena. For example, when the well-known mesmeric clairvoyant, George Goble, openly confessed to having cheated in 1845, it was argued by his mentor that this was caused by the same mesmeric state that was supposed to induce his clairvoyant abilities (Forbes, 1845). The attribution of fraudulent behaviour to some aspect of the phenomena in question continued. By 1862, it was already being said by spiritualists that it was ‘lamentably common that mediums sometimes “helped the spirits”’, and the accepted cheating of several mediums then (e.g. Foster, Colchester) and since (e.g. the Davenports, Slade, Palladino) has been attributed either to bad spirits, or to the pressure of producing phenomena over which they had no control.⁸ More recent psychics have been defended in similar ways, and the argument that an individual can cheat yet also be genuine has been a familiar theme in psychical research (Beloff, 1991; Braude, 1997). By attributing fraud to the phenomena in question, either directly or else to the result of pressure brought about by its uncontrollable nature, fraud has been long framed as an unfortunate by-product of the phenomena.

⁷ For examples of ‘The Mysterious Lady’, a popular entertainer of the 1840S, being framed as genuine, see: Paris (1853), p. 122; Lee (1866), p. 435. For examples of spiritualists framing avowed duplications as genuine, see: ‘Wonderful manifestations in India’, *Spiritual Magazine*, 6(3), 1865, p. 120; ‘The Miracle Circle’, *Spiritual Magazine*, 6(12), 1865, p. 559; ‘Mr Sothern and the Miracle Circle’, *Spiritual Magazine*, 1(1), 1866, p. 44; Podmore, 1902, ii, 62; Doyle (1930).

⁸ On Foster and Colchester, see: ‘Mr S. C. Hall and Mr Foster’, *Spiritual Magazine*, 1862, 3(2), p. 91; ‘The press and the mediums’, *Spiritualism Magazine*, 1862, 2(4), p. 153. On cheating mediums being blamed on unconscious influence, see: ‘Cheating mediums’, *Spiritual Magazine*, 1862, 3(6), p. 273; ‘A painful controversy’, *Spiritual Magazine*, 1874, 9(6), pp. 280-1; Podmore, 1902, ii, p. 109. Braude (1997), p. 95.

All the observed facts, whether demonstrations of extraordinary phenomena or of failure, duplication by ordinary means or exposure of fraud, have been disputed not simply in terms of what has been observed but also in terms of what agreed observations have meant as evidence. In doing so, all of the facts have been interpreted and presented as evidence both for and against the reality of the phenomena. Clearly, not all of the above arguments have been used in disputes over every instance, but they have been a part of the debate for a very long time, and have regularly been used to maintain a position of belief or disbelief in the face of potentially challenging facts. Disbelief has been maintained by framing all the observed phenomena as the product of error and fraud, whilst belief has been maintained by framing all (seemingly) negative observations as evidence of the phenomena. Many people, of course, have changed their positions, but such arguments have meant that nobody has needed to do so on the basis of even the agreed facts, since any given fact might be taken as evidence in support of one's existing view. The inability to settle the matter by appeal to observation alone has meant that the ongoing dispute has simultaneously appealed to expertise in observation, which shall be considered in the next section.

Meanwhile, it is worth noting that what has been said so far is in line with what has already been said of recent parapsychology experiments (Collins & Pinch, 1982). Indeed, according to Collins (1992), that an agreed failure to produce psi in a given experiment has been taken as confirmation of opposing beliefs can be seen, like disputes over what counts as a replication, as an example of how '[i]t is not the regularity of the world that imposes itself on our senses but the regularity of our institutionalized beliefs that imposes itself on the world' (Collins, 1992, p. 148). However, as Barnes, Bloor and Henry (1996) have suggested, parapsychologists nevertheless distinguish between positive and negative findings, a distinction most likely prompted by something out there in the physical world (p. 76). Indeed, what these disputes show is that while proponents and critics can indeed come to opposing conclusions about the agreed facts, this is not without some discursive work in order to reframe the facts as evidence that supports, rather than challenges, their own position.

What all of this shows is that, though we cannot regard these disputes as evidence that our beliefs about the world are immune to the world itself, we can treat them as examples of how beliefs are constructed and maintained in the social world. After all, whatever else they were, these disputes were expressions of belief either that such phenomena were real or that they were not. And this was not merely a case of individuals who held certain beliefs justifying their own positions; these disputes were a means through which positions of belief themselves were formulated and maintained. Beliefs (and disbeliefs) were adopted and persisted in a context of awareness of opposing points of view, and were necessarily bound up with, and

depended upon, reasons for holding them. As discursive psychologists have shown, expressions of belief are not merely outer expressions of inner beliefs but are produced in and for a social context, designed to address potential difficulties (e.g. Edwards, 1992), and even what appear to be purely descriptive statements about paranormal phenomena involve subtle warranting (Wooffitt, 1992). Designed for a hostile audience, these disputes were, and remain, the most detailed evidence of beliefs about extraordinary phenomena that we have. They may have been outward expressions of individual cognitive processes, differential factors were no doubt at play, and cognitive dissonance might be invoked in order to explain belief persistence, but the forms that they took and the ways in which they were maintained were manifested in social interaction. Whatever inaccessible thoughts might have gone through the heads of disputants, this was how beliefs were made socially real, and so far as expressions of belief reflect unspoken beliefs, they reflected what people actually believed.

The relationship between discourse and cognition is, of course, a much larger question, but in history at least, we must deal with discourse, and in the discursive construction and maintenance of their respective beliefs, both proponents and critics have consistently appealed to expertise in observation. Appeals to the facts themselves were, as we have seen, inadequate since they were often disputed and, even when agreed upon, their meaning as evidence could always be disputed. Furthermore, while proponents have always ruled out ordinary means (e.g. trickery was impossible), and critics have regularly appealed to undetected ordinary methods (e.g. there may have been special apparatus), there is no observable difference between a genuine psychic feat and a fraudulent one based upon an undetected method (Lamont & Wiseman, 1999). For example, if one sees a human levitate, but cannot see any wires, one can frame it as genuine (because there were no wires) or as a trick (the wires must have been cleverly concealed), but the choice is not based upon different observations. Thus, all that a proponent has been able to argue is that, had there been an ordinary method, it would have been detected.⁹ For this reason, disputes over the facts have always been in some sense disputes over expertise in observation. However, as we shall see, they were also very much statements of and about belief, in that beliefs about the phenomena were not only constructed and maintained, but were also a topic through which both the facts and expertise could be disputed.

⁹ This indeed has been the explicit claim in countless cases, for example: 'A rap on the knuckles', *Spiritual Magazine*, 1860, 1(9), 407-13; 'Mr C. H. Foster', *Spiritual Magazine*, 1862, 3(1), pp. 37-40; 'Mr S. C. Hall and Mr Foster', *Spiritual Magazine*, 1862, 3(2), p. 91; London Dialectical Society (1873), pp. 134-5; Cox (1974); Braude (1997), p. 96.

The making of expertise

In an experimental context, disputes have invariably been about whether the conditions of the experiment were such that ordinary methods could have been involved. However, the lack of agreement over what counts as appropriate conditions or adequate controls, and the ever-present possibility that any procedures might not be applied correctly, means that these disputes have also come back to matters of adequate scientific expertise. Thus, scientists on both sides of the dispute have appealed to such things as academic qualifications, membership of scientific associations, and specialist knowledge deemed essential for a scientific investigation (e.g. McClenon, 1984; Winter, 1998; Lamont, 2004; Noakes, 2004). However, disputes over extraordinary phenomena have always been conducted in a wider context than that of the experiment, and have been about more than scientific expertise. What has always been the case is that proponents have had to argue that they were competent to observe accurately and to exclude ordinary explanations, and scientific expertise has only been one way of doing this.

Indeed, one of the most persistent themes in these disputes has been that no particular expertise is needed in order to observe facts with one's own eyes. At the same time as Victorian scientists were arguing that special training was essential to proper observation, observers of spiritualist phenomena were appealing to their senses as a means of establishing the facts, regardless of their implausibility or any particular expertise.¹⁰ Indeed, the idea that specialist knowledge was necessary in order to be a reliable observer of facts could be forcefully rejected. Benjamin Coleman resented being thought 'not qualified to judge of plain matters of facts made patent to our senses, because, forsooth, we are deficient in scientific training! You insult our practical common sense and earn our contempt for your scientific nonsense', and many others have more subtly questioned the particular expertise of scientists in matters of observation, even whilst acknowledging that it is scientists' job to explain the (observed) facts.¹¹ And, despite the growing use by critics since of arguments about the fallibility of observation, it has continued to be claimed that ordinary witnesses are no more prone to flawed observations than scientists (e.g. Braude, 1997). Certainly, scientists (and non-scientists) on both sides of the disputes have appealed to scientific credentials where

¹⁰ For example: 'The Saturday Review', *Spiritual Magazine*, 4(4), 1863, p. 177; 'Two honest letters', *Spiritual Magazine*, 4(6), 1863, p. 266; Webster, 1865, pp. 37-8; 'Spiritual manifestations', *Spiritual Magazine*, 1870, p. 21.

¹¹ Coleman's quote is from *The Spiritualist*, 1871, 2, p. 13. For further examples, see: 'Extraordinary uproar: lecture on mesmerism', *Northern Star and Leeds Advertiser*, 13 January 1844, p. 2; 'A letter from William Howitt', *Spiritual Magazine*, 2(10), 1861, p. 450; Rymer, 1857, p. 41; Webster, 1865, pp. 37-8; 'Letter from the late Prof Gregory', *Spiritual Magazine*, 1865, 6(10), p. 452.

possible, but both have also appealed to other forms of expertise. For example, some argued that legal expertise was as valid as scientific expertise (e.g. Richards, 2001), and both critics and proponents have regularly appealed to the expertise of conjurors in order to argue that various phenomena could or could not have been the result of trickery.¹²

Nevertheless, scientific expertise has been a major theme within the disputes over the reality of such phenomena, and this has provided an opportunity for individuals to construct scientific expertise by engaging in boundary-work to exclude unorthodox knowledge from the scientific world. As a result, those who have studied extraordinary phenomena have often been excluded from membership of scientific institutions and associations, and their work from conferences and journals (e.g. Mauskopf & McVaugh, 1980; McClenon, 1984; Oppenheim, 1988; Winter, 1998; Luckhurst, 2001). Such exclusion has been significant, since it has framed not only those excluded as unscientific but also those included as scientific. Nevertheless, all of this can be understood as part of the wider dispute over the reality of the phenomena in question, since all of the arguments for expulsion have been based on the view that the phenomena were not real.

An example of such boundary-work, and of its location within the wider dispute about the reality of the phenomena, can be found in the early days of academic psychology. It has been argued that early academic psychologists engaged in particular modes of boundary-work to exclude psychical research from the boundaries of scientific psychology, by testing psychics and by creating a new area: the psychology of deception and belief (e.g. Coon, 1992; Wolfram, 2006). First, this was not simply a dispute between orthodox and unorthodox science, since the disputes were themselves about what counted as orthodox and unorthodox; indeed, so far as 'orthodox' psychologists tested psychics, they were by definition doing psychical research. Second, the psychology of deception and belief was hardly an 'area' of psychology, since publications appeared largely in non-specialist journals, and in such an ad hoc fashion that Norman Triplett, when he published a doctoral dissertation on the psychology of deception in 1900, was not even aware that Joseph Jastrow had published on the topic just a few years earlier (Triplett, 1900). Psychologists such as Jastrow were certainly in the business of constructing their own psychological expertise at the same time as they

¹² Examples of proponents' use of conjuror's expertise include: 'The press', *Spiritual Magazine*, 1860, 1(11), p. 485; 'Sir William a Beckett the judge', *Spiritual Magazine*, 1863, 4(8), p. 354; 'Lyon v Home', *Spiritual Magazine*, 1868, 3(6), pp. 255-6; London Dialectical Society (1873), pp. 134-5; Cox (1974); Margolis (1998), p. 55. Examples of critics include: Forbes (1845); 'Spirit-rapping', *Literary Gazette*, 8 September, 1860, pp. 180-1; 'Spiritualism', *Fraser's Magazine*, 66, 1862, p. 521; 'Magic', *British Quarterly Review*, 42, 1865, pp. 76-97; 'Report on Spiritualism', *Athenaeum*, 28 October 1871, pp. 556-8; Marshall and Wendt (1980); Randi (1975).

dismissed the phenomena, but such boundary-work might be better seen as part of a longer tradition, one that was part of the wider dispute about the reality of extraordinary phenomena.

After all, it has been an ongoing theme in the wider dispute about the reality of the phenomena that psychological scientists, including those prior to the emergence of Psychology as a discipline, have rejected the reality of extraordinary phenomena by deploying a 'psychology of error' (Lamont, 2010b). By attributing belief in such phenomena to poor observation, bias, gullibility and so on, psychological scientists have long dismissed the phenomena as they constructed boundaries of psychological expertise between themselves and both rivals and the public. For example, in 1845, as Sir John Forbes dismissed mesmerism, he contrasted his own expertise with that of mesmerists and the public, both groups being described as unscientific, the former biased and the latter gullible, and neither capable of making proper observations (Forbes, 1845: xi-ix). William Benjamin Carpenter similarly compared his own specialist knowledge with that of both scientific proponents of spiritualist phenomena and the public, who were (in his view) incompetent observers, gullible and prone to wishful thinking (Carpenter, 1871). With the emergence of academic Psychology, early American and German psychologists were merely continuing the trend of dismissing the phenomena in terms of incompetence on the part of observers while simultaneously presenting themselves as possessing proper expertise, a tradition that has continued until more recent times (e.g. Boring, 1960; Alcock, 1980).

Throughout all of this, however, there has been an ongoing circularity, since the topic of belief has featured not only as explanandum, but also as an explanation for the reported facts, and as an indication of competence (or lack of it) in observing such facts. For example, critics have not only explained belief as the result of erroneous observation, but have also cited belief in such phenomena as an indication that proponents are incompetent observers. The phenomena of mesmerism, spiritualism, psychical research and parapsychology have all been rejected by the claim that observers have been guilty of a lack of scepticism, the result in turn of inadequate scientific training or a personal desire to believe. Thus, for Forbes (1845), 'ordinary' (i.e. unscientific) observers of mesmeric phenomena accepted them 'as marvels of the highest order and as truths admitting of no question', Carpenter (1871) regarded 'a proclivity to believe' as one of the most potent sources of fallacy among unqualified observers (p. 342), and Jastrow (1889) claimed that believers were prone to errors in observation due to their 'mental condition' (p. 730). The idea that belief in such phenomena is in itself a sign of an incompetent observer has remained a consistent feature of the dispute, to the point that many critics have demanded that psychic phenomena be observed by sceptics before being taken seriously, and psychologists continue to suggest that paranormal belief

causes people to misinterpret events as paranormal (e.g. Gilovich, 1991; Hergovich, 2004). Thus, critics have long cited belief as an indication of incompetence and, via a psychology of error, as a way of explaining the facts themselves.

Meanwhile, proponents have also cited belief as an explanation for the facts. Belief has been cited as a factor in creating an environment that is conducive to the production of phenomena, and a lack of phenomena has regularly been attributed to the presence of disbelievers. For example, it was often stated by mesmerists that the influence of sceptical people nearby could neutralise the phenomena (Gregory, 1851, p. 22), and spiritualists and psychical researchers often complained of the dampening effects of a negative attitude, a problem that has continued to be cited in parapsychology experiments (e.g. Crawford, 1916; Collins and Pinch, 1982). Indeed, the role of personal belief in the production of phenomena has become widely accepted in parapsychology, with the so-called sheep-goat effect (that believers are more psi-conducive than sceptics) being regarded by parapsychologists as one of its most reliable findings (Schmeidler, 1958; Beloff, 1993). Thus, proponents have also regularly cited belief (including the belief that such phenomena are not real) as an explanation for the facts (including the fact that no phenomena occurred).

The longstanding allegation that belief in such phenomena suggests incompetence in observation has also been addressed by proponents. On the one hand, they have long argued that they are critical thinkers and, therefore, competent observers. In doing so, they have invariably claimed that they began as sceptics but changed their minds as a result of the facts. For example, Weekes (1843) had been 'a decided sceptic' before becoming convinced of the reality of lucid somnambulism, Beattie (1877) had, 'in spite of a bitterly opposed state of mind, been compelled to believe in spiritualism', and Margolis (1998) came to believe that Uri Geller was genuine despite 'considerable scepticism'. On the other hand, they have consistently argued, it is critics who have been either ignorant of the facts or else refused to believe the facts because of their own narrow-mindedness. For example, W. J. Vernon complained of critics of mesmerism who refused to believe the facts because they would 'disarrange previous opinions' ('Extraordinary uproar', 1844), Crookes (1874) of critics of spiritualism who avoided enquiry into facts that 'appeared to clash with prevailing opinions', and the argument has continued to the present day (e.g. Braude, 1997).

The to-and-fro has persisted as critics, in turn, have denied the charge of narrow-mindedness, invariably claiming that their own enquiries began with a willingness to believe, or even initial belief, but that they were forced by the facts to come to a sceptical conclusion. For example, J. Q. Rumball, an active debunker of mesmerism, had 'placed faith in it for some

time' ('Greenwich lecture hall', 1844), Carpenter (1871) had pursued an investigation of spiritualism until he was 'forced to the conclusion' that they were not real (p. 328), and more recent prominent sceptics have stressed that they began as firm believers in the paranormal (e.g. Couttie, 1988, Blackmore, 2000). These avowals of prior belief, like the avowals of prior scepticism, are rhetorically designed in a way that not only constructs the facts as independent of the speaker, but also addresses potential accusations of, respectively, narrow-mindedness and gullibility (Lamont, 2007b). In short, they make the facts seem more real, and thus the speaker's position more convincing; the facts are supported by appeals to belief, and beliefs warranted by appeals to the facts.

These disputes about the facts and expertise have therefore been more than a negotiation of scientific boundaries, and belief has been more than a subject of enquiry for academic psychologists through which they have engaged in scientific boundary-work. Since before the emergence of the discipline, the disputes have been a means of formulating and warranting beliefs about the phenomena, and such beliefs have in turn been used (by both proponents and critics) to explain the facts, and as an indication of expertise (or lack of it) in the observation of facts. In a variety of ways, statements of and about belief have been used by both sides to argue about the reality of the phenomena and, in doing so, as a means of constructing and maintaining their own respective beliefs.

It is, then, hardly surprising that when belief became a subject of Psychological enquiry, it would be similarly entangled in these disputes about the phenomena. And it did eventually become a formal topic of enquiry for psychologists, but not only for those who sought to exclude psychical research from the world of science. On the contrary, two distinct versions of a psychology of belief emerged, each reflecting one side of the ongoing dispute about the reality of the phenomena.

The making of belief

As discussed above, an informal psychology of error predated the emergence of Psychology as a discipline, and the early American psychologists' psychology of belief was far from formal. Indeed a formal psychology of belief, in the sense of a large number of publications in scientific journals that drew upon prior work and sought to develop methods and theory, did not emerge until the 20th century. When it did, the form(s) it took directly reflected different sides of the ongoing disputes about the reality of such phenomena.

At the beginning of the 20th century, a psychology of superstition emerged within the United States, from a concern about continued superstitious belief even among college students (e.g. Dresslar, 1907). Within this educational context, such beliefs were seen as irrational, and as a problem to be eradicated (e.g. Dresslar, 1910; Conklin, 1919). An extensive literature appeared over the following decades until, in the 1970s, a new psychology of paranormal belief appeared (Irwin, 2009). This was driven by similar concerns about growing interest in the paranormal, and described paranormal belief as a new superstition (Jones et al, 1977). It was also associated with a new sceptical movement centred on the foundation of the Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP) and its organ, the *Skeptical Inquirer*. Early contributors to the psychology of paranormal belief were members of CSICOP, published in its journal, cited related sceptical literature in their own articles, and discussed such beliefs in very similar ways, i.e. as not only wrong but also dangerous (e.g. Alcock & Otis, 1980; Alcock, 1981; Otis & Alcock, 1982; Tobacyk, 1983; Tobacyk & Milford, 1983).

Meanwhile, at around the same time, another psychology of paranormal belief emerged that had its roots in experimental parapsychology. By then, Gertrude Schmeidler had conducted experiments that suggested believers in clairvoyance were more successful in psi experiments than non-believers, and had coined this the ‘sheep-goat effect’ (Schmeidler & McConnell, 1958). This seemed to suggest a possible solution to the problem of the elusiveness of psi that had faced parapsychologists. It also reflected a longer history of failure to produce the phenomena on demand, and of claims that this might be due to the effects of belief (or disbelief) on the phenomena. In any case, it led to growing parapsychological interest in the question of belief (Lawrence, 1993).

These two psychologies of belief were fundamentally different in terms of what was being studied, how it was being measured, what hypotheses were being explored, and the purpose of the research itself. For sceptical psychologists, the ‘paranormal’ included not only extrasensory perception but also a wide range of other strange phenomena such as witches, superstitions, UFOs and the Loch Ness Monster. This wide definition was the product of those who regarded all these phenomena as equally erroneous. Indeed, critics of parapsychology have long sought to discredit such phenomena by making associations with witchcraft and the occult (Collins and Pinch, 1979). This association now became part of the scales they used to measure beliefs (Jones et al, 1977; Otis and Alcock, 1983, Tobacyk and Milford, 1983). The ongoing view that all such phenomena were the product of error and fraud was similarly reflected in the ‘cognitive deficits’ hypothesis they offered, which explained paranormal belief in terms of low intelligence, inadequate education, and so on

(Irwin, 1993). The purpose of this latest example of the psychology of error was, like previous versions, avowedly to understand how beliefs that were not only wrong but also harmful might be reduced.

In stark contrast, parapsychologists defined the paranormal far more narrowly ('psi' being defined as ESP and psychokinesis, and sometimes including survival after death). The scales that these researchers used reflected this narrower definition (e.g. Thalbourne & Haraldsson, 1980), which did not ask about witches or superstitions, and their papers, normally published in parapsychology journals, rejected the 'cognitive deficits' hypotheses that they felt was part of a sceptical agenda (Irwin, 1993; Goulding & Parker, 2001). Indeed, since from their perspective, paranormal beliefs were not necessarily wrong, the purpose was not to eradicate belief but in part to provide a better understanding of how psi worked, since the elusive phenomenon might be more easily found by understanding the sheep-goat effect. This was itself a direct reflection of the longstanding views among proponents that regular failure to produce the phenomena was a result of the nature of the phenomena, and that beliefs of those present might be responsible for success or failure.

For several years, psychologists researching paranormal belief continued to do so on the basis of different definitions, measures, hypotheses and aims, all of which directly reflected different views about the reality of the paranormal. In short, these two versions of the psychology of paranormal belief can be seen as expressions of opposing beliefs about the paranormal; they have themselves been manifestations of the very beliefs that they have sought to understand.

Summary and discussion

Despite the various contexts, interests, networks and practices involved over the period discussed, it seems that we have been having the same argument for a very long time. Since at least the beginning of the Victorian period (i.e. before the emergence of Modern Spiritualism), the dispute has been ostensibly about the observed facts, both positive (the reported phenomena) and negative (failures, duplications and exposures). However, even when both sides have agreed about the facts, the same facts have been, and could always be, framed as evidence either for or against the reality of the phenomena. Thus, as the endless dispute over the observed facts has continued, both sides have also disputed expertise in observation. Scientific expertise, though an important theme, has not been the only form of expertise recognised. However, what these disputes have provided is an opportunity for

psychological scientists to construct their own expertise over that of others by deploying a psychology of error. All of this can be seen as part of the ongoing dispute over the reality of such phenomena, which itself can be seen as a manifestation of opposing beliefs about such phenomena. However, throughout all of this, beliefs have been not only formulated and maintained, they have also been cited (by both sides) as an explanation for the facts and as an indication of expertise. These arguments fed into a formal psychology of belief in the 20th century, in which two distinct versions have emerged, each reflecting one side of the ongoing dispute.

What this hopefully shows is that an historical perspective can contribute to understanding of Psychology and psychology, of how Psychological knowledge has been constructed and of the subject matter itself. It shows that Psychological understanding of beliefs about extraordinary psychological phenomena has been part of a wider discourse about the reality of the phenomena, and has been continually shaped by different views on the latter question. It has been both an expression and a justification of a particular position of belief about such phenomena. In short, the Psychology of belief has been part and parcel of the subject matter it has sought to explain.

History also shows that beliefs (both for and against the reality of the phenomena) have long been constructed and maintained in similar ways, and in ways that are quite compatible with the agreed upon facts. And, whilst it may be easy to regard the justifications of believers as ingenious ways of hanging on to their beliefs in the face of seemingly obvious negative evidence, critics have regularly been accused by proponents of engaging in similar tactics. That the former view has tended to prevail is itself a reflection of the sceptical majority view rather than of its self-evident truth.

One practical implication of all this has been that there has been an asymmetrical understanding of belief. A psychology of error has continued to dominate the literature, and can be seen in the titles of journal articles (which invariably refer to belief *in* the paranormal rather than belief *about* the paranormal), of books such as *How we know what isn't so* (Gilovich, 1991) and *Why people believe weird things* (Shermer, 1997), and of various hypotheses that seek to explain 'belief' rather than 'disbelief' (for example, the 'misattribution hypothesis', the 'cognitive deficit hypothesis', and the 'social marginality hypothesis'). In short, as might also be argued in the case of religious belief, psychologists have typically treated 'belief' rather than 'disbelief' as problematic, and sought to understand why people believe in the paranormal rather than why people do not.

However, what the history of these disputes shows is that expressions of disbelief are far from unproblematic, and a symmetrical approach shows that both sides engage in a great deal of discursive work in order to construct and maintain their position. And if, as cognitive psychologists do, one treats belief as a cognitive phenomenon that can be reliably represented via expression, then disbelief is equally worthy of Psychological attention. It might be argued, of course, that questionnaire studies naturally distinguish between belief and disbelief, and that findings provide information on both believers and disbelievers. However, introductions and discussions in published articles, as well as textbooks, have been overwhelmingly concerned with the former rather than the latter, and this focus has largely reflected the mainstream psychology of error approach that has long been a means of debunking such phenomena.

Furthermore, Psychological questionnaires have relied upon particular abstract categories and the assumption that a particular expression at a particular time about these particular categories amounts to actual belief. This is not how beliefs (and disbeliefs) in the real world are manifested in expression, which is in a form that is invariably bound up with appeals to what is deemed appropriate evidence, and referring to specific events rather than abstract categories. If expressions of belief do indeed represent actual belief, then beliefs are not easily isolated from particulars, nor are they independent of reasons for holding them.

They are also bound up with moral arguments. Just as they have been disputed in terms of their compatibility with science, so they have been disputed in terms of their compatibility with contemporary religious and social matters. For mesmerists, spiritualists and psychical researchers, the phenomena in question have been presented as not only true but also useful and good, from the possible medical benefits of mesmerism to the demonstration of an afterlife. For critics, such beliefs have been presented as not only wrong but also harmful, from comparisons with witchcraft to the dangers that such irrational thinking poses to progress and freedom. These various non-scientific considerations have been part of the process through which individuals have constructed and maintained their particular beliefs about extraordinary phenomena. That they have also been part of the process through which Psychology has constructed a scientific understanding of such beliefs only demonstrates that psychologists are people too.

Finally, the longstanding attempt to disseminate the view that beliefs in such phenomena are the product of error, from the anti-mesmerism publications of the early Victorian period all the way through to recent sceptical texts, have been an active attempt to draw upon Psychological knowledge in order to change beliefs. So far as these have succeeded, the

Psychology of belief has been not only shaped by, but also shaped, the beliefs it has been in the business of studying. It is, then, one more example of how Psychology is both constructed by, and constructive of, its subject matter.

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